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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,830	11/26/2003	Benjamin J. Sun	TRU-2206	9357
7590 Dale R. Lovercheck, Esquire DENTSPLY INTERNATIONAL, INC. 570 West College Avenue York, PA 17405			EXAMINER BUTLER, PATRICK NEAL	
			ART UNIT 1791	PAPER NUMBER
			MAIL DATE 11/12/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/722,830

Applicant(s)

SUN ET AL.

Examiner

Patrick Butler

Art Unit

1791

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3, 4, 6-16, 25 and 26 is/are pending in the application.
- 4a) Of the above claim(s) 13-16, 25 and 26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 4 and 6-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

A Notice of Non-Compliant Amendment was mailed 17 June 2008 noting that the amendments presented 14 February 2008 contains underlined text in Claim 1 in lines 8 and 9 that was originally presented (having a flexural modulus 37 °C) and that the amendment was improper since only added text should be underlined. (See MPEP 714 II C (B) - "All claims being currently amended must be presented with markings to indicate the changes that have been made relative to the immediate prior version.")

Applicant's Amendments filed 14 July 2008 also present the previously presented text in Claim 1 as underlined. However, the underlined previously presented text is addressed below regardless of the markings. For subsequent amendments, Applicant is requested to use proper claim markings for previously presented text.

Election/Restrictions

Applicant's election without traverse of species A, shaping over patient's teeth in-mouth, in the reply filed on 14 July 2008 is acknowledged. Claims 13-16, 25, and 26 withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 14 July 2008.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 4, and 6-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Sekiguchi et al. (Japan Patent No. 11-79925, with US Patent No. 6,136,881 relied upon for translation and citation purposes).

With respect to Claim 1, Sekiguchi teaches making a splint having elasticity (a method of shaping a flexible dental product selected from the group consisting of splints) by applying and adapting a photocuring resin in a sheet-like state onto a patient's teeth (shaping a light curable polymerizable composition into a dental product in a mouth of a patient), performing irradiation in the oral cavity before removal to complete curing externally (irradiating the polymerizable composition with light to partially cure the composition; removing the dental product from the mouth of the patient; irradiating said light curable polymerizable composition with light to form a cured flexible dental polymeric product) (see col. 5, lines 33-64). With respect to the flexural modulus and flexural strength limitations, Sekiguchi's product would necessarily have the claimed properties principally because Sekiguchi teaches making it with the claimed process. Moreover, Sekiguchi teaches having a bending strength at 37 °C of 21 or 28 MPa (3,000 p.s.i. or 4,100 p.s.i.) and an elastic modulus 0.3 or 0.6 GPa (40,000 or 90,000 p.s.i.) (see col. 6, line 63 through col. 7, line 2 and col. 9, line 66 through col. 10, line 7).

With respect to Claim 3, Sekiguchi teaches performing irradiation in the oral cavity before removal to complete curing externally in an light irradiating apparatus (at least partially cured in a mouth of a patient and a second portion of said light curable

polymerizable composition is at least partially cured in a light curing apparatus) (see col. 5, lines 33-64).

With respect to Claims 4 and 6-12, Sekiguchi's product would necessarily have the claimed properties principally because Sekiguchi teaches making it with the claimed process.

Response to Arguments

Applicant's arguments filed 20 February 2007, 14 November 2007, 14 February 2008, and 14 July 2008 have been fully considered but they are not persuasive.

Applicant argues with respect to the 35 USC 102 rejections. Applicant's arguments appear to be on the grounds that:

1) None of Bowen (US Patent No. 5,792,821), Rusin et al. (US Patent No. 6,437,019 B1), Bowen (US Patent No. 5,910,551), Volkel et al. (US Patent No. 6,057,383), Reiners et al. (US Patent No. 4,843,136), and Tateosian et al. (US Patent No. 5,554,665), solely or in combination with Tregillis (US Patent No. 5,338,190), teach the newly claimed product limitations (rather than previously claimed starting material limitations); the newly claimed combination of limitations of shaping a flexible dental nightguard or splint over teeth.

The Applicant's arguments are addressed as follows:

1) In view of Applicant's new claim limitation combination, Applicant's arguments with respect to the previously applied have been considered but are moot in view of the new ground of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick Butler whose telephone number is (571) 272-8517. The examiner can normally be reached on Mon.-Thu. 7:30 a.m.-5 p.m. and alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on (571) 272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/P. B./
Examiner, Art Unit 1791

/Monica A Huson/
Primary Examiner, Art Unit 1791